

REMARKS

Based on a previous claim election without traverse, claims 1-10 and 17-19 are withdrawn from consideration as being directed to a non-elected invention. In the non-final Office Action dated March 12, 2007, the Office rejected claims 11 and 16 under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Jeffers et al. (“Disproportionation of Dimethoxyborane,” *Inorg. Chem.* (1982), Vol. 21, pp. 2516-7). Claims 12 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jeffers et al. and further in view of Amendola et al. (US 6,433,129). Claim 13 was rejected pursuant to 35 U.S.C. § 112 as being indefinite, and pursuant to 35 U.S.C. § 103(a) as being unpatentable over Jeffers et al. and further in view of Hale et al. (US 4,931,154). Claim 14 was rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Jeffers et al. This Amendment addresses each of the Examiner’s rejections with the amendments to the claims as provided herewith and as discussed below.

The rejection of claim 13 pursuant to 35 U.S.C. § 112 as being indefinite has been addressed by means of the amendment to the claim as provided herewith and as suggested by the examiner. Applicants thank the Examiner for her suggested change. Similar corrections were made to claims 11 and 15.

The rejections of claims 11-16 pursuant to 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Jeffers et al., are addressed by the means of the amendments to the claims as provided herewith. In the specification of the present application, the source of fluid that is mixed with the borate to form a solution is repeatedly referred to as water. Paragraph 14 of the application states, “as described hereinafter, the source of the fluid will be described as a source of water.” Therefore, the solution that is formed when

mixing the fluid (water) with the borate will necessarily be a substantially aqueous solution. Thus, the limitation “substantially aqueous” added to amended claims 11-16, and included in new claims 20-23, is well supported in the original specification. In the Jeffers et al. reference, the fluid mixed with the borate is diborane (B_2H_6), which exists in the liquid phase at the very low temperatures in which the reaction cited in Jeffers et al. takes place. There is no mention in Jeffers et al. of the use of water or a substantially aqueous solution as the fluid in the subject reaction. Thus, Jeffers et al. does not anticipate every element of the amended claims, as required for a rejection under 35 U.S.C. § 102(b). As for the obviousness rejections under 35 U.S.C. § 103(a), the reaction in Jeffers et al. involves an equilibrium reaction between a specific borate and a specific borohydride, in the presence of liquid diborane, at extremely low temperatures, and using a specific source of ionizing radiation (microwaves). There is no broad discussion of converting borates to borohydrides, let alone that reaction occurring in a substantially aqueous solution. Moreover, given that the reaction in Jeffers et al. must take place at extremely low temperatures, this reference teaches away from the use of an aqueous solution. Also, as another factor in establishing unobviousness, there is nothing in the Jeffers et al. reference that would teach, motivate or suggest converting a borate in an aqueous solution to a borohydride outside of the low temperature conditions described in the reference. Therefore, claims 11-16, as amended, and new claims 20-23 are no longer obvious over Jeffers et al., and the rejections pursuant to 35 U.S.C. § 103(a) based on that reference by itself or in view of other references no longer apply.

Furthermore, there is no mention in any of the prior art references to a method of forming sodium borohydride by exposing sodium borate in a substantially aqueous solution to a nuclear radiation source to facilitate the formation of sodium borohydride, as claimed in new claim 23.

Additionally, the office has attempted to combine the references of Jeffers et al. with that of Amendola et al. Applicants believe that the office has erred inasmuch as the Jeffers et al. reference at column 2 specifically states that authors tested the “uncatalyzed reaction as follows.” There is no other teaching in Jeffers et al. which would lead one to look to references such as Amendola et al. to combine those teachings with it. In view of this clear teaching away of the use of a catalyst, Applicants contend this combination of references is inappropriate.

In view of the amendments to the claims and the new claims as provided herewith, it is believed that this application is now in condition for allowance. Therefore, a prompt Notice of Allowance of claims 11-16 and 20-23 is respectfully requested in the Office’s next action.

Applicant, by and through their counsel, would request that the Office telephone the attorney listed below in the event that a telephone conference could expedite the prompt handling of the present application.

Respectfully submitted,

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